Statement of Basis of the Federal Operating Permit

BASF TOTAL Petrochemicals LLC

Site Name: NAFTA Regional Olefins Complex
Area Name: Ethylene / Propylene Cracker and Cogeneration
Physical Location: Gate 99, Intersection of Hwy 73 and Hwy 366
Nearest City: Port Arthur
County: Jefferson

Permit Number: O2551
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2869
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: April 28, 2017

Operating Permit
Basis of Determination

Description of Revisions
In this revision, TCEQ update the issuance date for NSR permit 36644, in the NSR authorization reference table, to reflect recent amendment dated 11/17/2016. Major NSR Summary table was updated to include changes to NSR permit 36644. Requirements for units GRPHRSG for NSPS Db were updated. Requirements for units GTG-1 and GTG-2 for NSPS GG were corrected, as these units are not "electric utility" gas turbines. Applicabilities for boilers B-7240, B-7280, and B-7290 were updated.

Permit Area Process Description
Cracking Furnace No.9 is capable of cracking naphtha, diesel, butane, propane, ethane and a mixed feed of naphtha and diesel (co-cracking). The furnace is designed to produce ethylene from naphtha feed and diesel feed. The furnace is fueled by natural gas and/or cracker off gas generated within the Ethylene Plant. A selective catalytic reduction (SCR) system is used to control NO_x emissions from the furnace.

The site also has two natural gas-fired combined-cycle combustion turbines as prime movers for commercial electric generators ("A" and "B"). The site is classified a "cogeneration" facility since it produces steam for off-site uses as well as electricity. The system includes heat recovery steam generators (HRSGs) that recover the heat from the turbines' exhaust, to which fuel gas is added and burned for supplemental energy, to power steam turbines. There are miscellaneous internal combustion engines and smaller sources of emissions scattered around the site that are covered by site-wide requirements.

The two package boilers (Emission Unit ID Nos. B-7280 and B-7290) are capable of producing a nominal 250,000 lb/hr of superheated steam, for the purpose of increasing steam production flexibility at the site. The firing rate is limited to 425 MMBtu/hr for each boiler. The boilers are fueled by natural gas or High Pressure Fuel Gas (HPFG), or a combination of natural gas/HPFG and either C4-Acethylene fuel (C4-A) or C4 Vapor Stream fuel (C4VS). HPFG, C4-A and C4VS are fuel streams generated at the existing plant. A selective catalytic reduction (SCR) system is used to control NOx emissions from each boiler.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O2629

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, PM, NOX, HAPS, CO

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A
    - Acronym list
- Appendix B
    - Copies of major NSR authorizations

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the

requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the "index number," detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Appendix B
Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by

30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions
All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	Yes
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No

Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.

17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Unit ID	Regulation	Index Number	Basis of Determination*
DM-8401AX	30 TAC Chapter 117, Subchapter B	R-117	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
DM-8401AX	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
DM-8401BX	30 TAC Chapter 117, Subchapter B	R-117	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
DM-8401BX	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Emergency use where the RICE does not operate or is not contractually obligated to be available for more than 15 hours per calendar year as specified in 40 CFR §63.6640(f)(2)(ii)-(iii) or does not operate as specified in 40 CFR §63.6640(f)(4)(ii).
GTGENG-1	30 TAC Chapter 117, Subchapter B	R-117	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
GTGENG-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Limited use.
GTGENG-2	30 TAC Chapter 117, Subchapter B	R-117	Horsepower Rating = HP is greater than or equal to 300 RACT Date Placed in Service = After June 9, 1993 and on or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020 Functionally Identical Replacement = Unit is not a functionally identical replacement
GTGENG-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake HP greater than 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Service Type = Limited use.
D-8001R	40 CFR Part 61, Subpart FF	61FF-343	Bypass Line = The closed vent system contains any by-pass line that could divert the vent stream away from the control device.

Unit ID	Regulation	Index Number	Basis of Determination*
			Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Bypass Line Valve = A flow indicator is used to monitor the by-pass line. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Control Device Type/Operations = Flare Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation. Alternate Monitoring Parameters = Alternate monitoring parameters not requested Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.
D-8010X	40 CFR Part 61, Subpart FF	61FF-343-1	Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Control Device Type/Operations = Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation. Alternate Monitoring Parameters = Alternate monitoring parameters not requested Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.
D-8010X	40 CFR Part 61, Subpart FF	61FF-343-2	Bypass Line = The closed vent system does not contain any by-pass line that could divert the vent stream away from the control device. Tank Control Requirements = The tank has a fixed roof and closed vent system routing vapors to either a fuel gas system or control device. Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351. Fuel Gas System = Gaseous emissions from the tank or enclosure are not routed to a fuel gas system. Control Device Type/Operations = Carbon adsorption system that does not regenerate the carbon bed directly in the control device Cover and Closed Vent = The cover and closed vent system are not operated such that the tank is maintained at a pressure less

Unit ID	Regulation	Index Number	Basis of Determination*
			than atmospheric pressure and meets the conditions of 40 CFR § 61.343(a)(1)(i)(C)(1) - (3). Closed Vent System and Control Device AMOC = Not using an alternate means of compliance Engineering Calculations = Engineering calculations show that the control device is proven to achieve its emission limitation. Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks. Carbon Replacement Interval = The carbon in the carbon adsorption system is replaced when monitoring indicates breakthrough.
D-8010X	40 CFR Part 63, Subpart G	63G-WW2	Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure. Process Wastewater = The tank receives, manages, or treats process wastewater streams Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172 Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i). Wastewater Tank Properties = Properties do not qualify for exemption By-pass Lines = Closed vent system has no by-pass lines Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device Combination of Control Devices = The vent stream is treated using a single control device. Monitoring Options = Control device is using an organic monitoring device as allowed under § 63.143(e)(2). Continuous Monitoring = Complying with the continuous monitoring requirements of § 63.143(e)(1) or § 63.143(e)(2) in Table 13. Control Device Type = Thermal vapor incinerator New Source = The source is an existing source. Compliance with 40 CFR 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i) Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.
D-8010X	40 CFR Part 63, Subpart G	63G-WW3	Negative Pressure = The fixed roof and closed vent systems are not operated and maintained under negative pressure. Process Wastewater = The tank receives, manages, or treats process wastewater streams Regenerate On-site = Carbon adsorption bed is not regenerated directly onsite. Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172 Performance Test = Performance tests are not conducted using the methods and procedures specified in § 63.145(i). Wastewater Tank Properties = Properties do not qualify for exemption By-pass Lines = Closed vent system has no by-pass lines Emission Control Type = Fixed roof tank vented through a closed vent system that routes the organic HAP vapors vented from the wastewater tank to a control device Combination of Control Devices = The vent stream is treated using a single control device. Monitoring Options = Control device is using an organic monitoring device as allowed under § 63.143(e)(2). Continuous Monitoring = Complying with the continuous monitoring requirements of § 63.143(e)(1) or § 63.143(e)(2) in Table 13.

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type = Carbon adsorber New Source = The source is an existing source. Alternate Monitoring Parameters = Alternate monitoring parameters for the control device have not been requested or approved.
DSL-TK	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-1701	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-1702	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-1703	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-1704	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a vapor recovery system (VRS) True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate

Unit ID	Regulation	Index Number	Basis of Determination*
			Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Control Device Type = Carbon adsorption system
TK-2210X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-2501	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK-2501	40 CFR Part 60, Subpart Kb	60Kb-A	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal
TK-2501	40 CFR Part 61, Subpart FF	61FF-351	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal
TK-3110X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-3710X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-7403X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-8001	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using an internal floating roof (IFR) True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK-8001	40 CFR Part 60, Subpart Kb	60KB-A	Product Stored = Waste mixture of indeterminate or variable composition Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia Storage Vessel Description = Fixed roof with an internal floating roof using a mechanical shoe seal
TK-8001	40 CFR Part 61, Subpart FF	61FF-351	Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF. Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351. Kb Tank Type = Using a fixed roof and internal floating roof, that meets the requirements of 40 CFR § 60.112b(a)(1) Seal Type = Mechanical shoe seal
TK-8001	40 CFR Part 63, Subpart G	63G-WW1	Process Wastewater = The tank receives, manages, or treats process wastewater streams Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged. Meets 40 CFR 63.139(d) = The tank meets the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2). Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151m3 and vapor pressure of liquid stored is less than 5.2 kPa Emission Control Type = Fixed-roof tank equipped with an internal floating roof that meets the requirements specified in 40 CFR § 63.119(b) New Source = The source is an existing source.
TK-8002X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls

Unit ID	Regulation	Index Number	Basis of Determination*
			True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-8003X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK-8101	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank (other than welded) using an external floating roof (EFR) True Vapor Pressure = True vapor pressure is less than 1.0 psia Primary Seal = Mechanical shoe Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK-9603X	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
Z-7001	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
Z-7002	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia

Unit ID	Regulation	Index Number	Basis of Determination*
			Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
Z-7401	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
Z-8011	30 TAC Chapter 115, Storage of VOCs	R5112	Today's Date = Today's date is March 1, 2013 or later. Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
LOADRACKS	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-A	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Loading and unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.
LOADRACKS	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-B	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Liquefied petroleum gas (LPG) Transfer Type = Loading and unloading.
GRPHEATERS	30 TAC Chapter 117, Subchapter B	R-117	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
H-0900	30 TAC Chapter 117, Subchapter B	R-117	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
H-1000	30 TAC Chapter 117, Subchapter	R-117	Unit Type = Process heater

Unit ID	Regulation	Index Number	Basis of Determination*
	B		Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
B-7240	30 TAC Chapter 117, Subchapter B	R-117	NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. Functionally Identical Replacement = Unit is not a functionally identical replacement. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.
B-7240	40 CFR Part 60, Subpart Db	60Db-A	Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a NO_x emission limit that applies specifically when the byproduct/waste is combusted. Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. D-Series Fuel Type #1 = Natural gas. D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. Heat Input Capacity = Heat input capacity is greater than 100 MMBtu/hr (29 MW) but less than or equal to 250 MMBtu/hr (73 MW). PM Monitoring Type = No particulate monitoring. D-Series Fuel Type #3 = Byproduct/waste Opacity Monitoring Type = No particulate (opacity) monitoring. Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOx Monitoring Type = Continuous emission monitoring system. Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical. SO2 Monitoring Type = No SO_2 monitoring. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3). Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF.

Unit ID	Regulation	Index Number	Basis of Determination*
			Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Unit Type = OTHER UNIT TYPE ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
B-7240	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.
B-7280	30 TAC Chapter 117, Subchapter B	R-117	NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. Functionally Identical Replacement = Unit is not a functionally identical replacement. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.
B-7280	40 CFR Part 60, Subpart Db	60Db-B	Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a NO_x emission limit that applies specifically when the byproduct/waste is combusted. Construction/Modification Date = Constructed or reconstructed after February 28, 2005. D-Series Fuel Type #1 = Natural gas. D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW). PM Monitoring Type = No particulate monitoring. D-Series Fuel Type #3 = Byproduct/waste Opacity Monitoring Type = No particulate (opacity) monitoring. Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOx Monitoring Type = Continuous emission monitoring system. Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D. Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical. SO2 Monitoring Type = No SO_2 monitoring. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60,

Unit ID	Regulation	Index Number	Basis of Determination*
			Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3). Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF. Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Unit Type = OTHER UNIT TYPE ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
B-7280	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.
B-7290	30 TAC Chapter 117, Subchapter B	R-117	NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. Functionally Identical Replacement = Unit is not a functionally identical replacement. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.
B-7290	40 CFR Part 60, Subpart Db	60Db-B	60.42b(k)(2) Low Sulfur Exemption = The § 60.42b(k)(2) exemption applies. Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA Administrator to establish a NO_x emission limit that applies specifically when the byproduct/waste is combusted. Construction/Modification Date = Constructed or reconstructed after February 28, 2005. D-Series Fuel Type #1 = Natural gas. D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW). PM Monitoring Type = No particulate monitoring. D-Series Fuel Type #3 = Byproduct/waste Opacity Monitoring Type = No particulate (opacity) monitoring.

Unit ID	Regulation	Index Number	Basis of Determination*
			Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOx Monitoring Type = Continuous emission monitoring system. Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D. Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical. SO2 Monitoring Type = No SO_2 monitoring. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3). Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF. Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Unit Type = OTHER UNIT TYPE ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
B-7290	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.
GRPHRSG	30 TAC Chapter 117, Subchapter B	R-117	NOx Emission Limitation = Title 30 TAC § 117.105 (relating to Emission Specifications for Reasonably Available Control Technology). Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 250 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC § 117.9000. Functionally Identical Replacement = Unit is not a functionally identical replacement. Fuel Type #1 = Natural gas. Fuel Type #2 = Gaseous fuel other than natural gas landfill gas or renewable non-fossil fuel gases. Annual Heat Input = Annual heat input is greater than $2.2(10^{11})$ Btu/yr, based on rolling 12-month average.
GRPHRSG	40 CFR Part 60, Subpart Db	60Db-B	60.42b(k)(2) Low Sulfur Exemption = The § 60.42b(k)(2) exemption applies. Alternate Emission Limit (AEL) = The facility combusts byproduct/waste with either natural gas or oil and did not petition the EPA

Unit ID	Regulation	Index Number	Basis of Determination*
			Administrator to establish a NO_x emission limit that applies specifically when the byproduct/waste is combusted. Construction/Modification Date = Constructed or reconstructed after July 9, 1997, and on or before February 28, 2005. D-Series Fuel Type #1 = Natural gas. D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW). PM Monitoring Type = No particulate monitoring. D-Series Fuel Type #3 = Byproduct/waste Opacity Monitoring Type = No particulate (opacity) monitoring. Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da. Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281. NOx Monitoring Type = No NO_x monitoring. Subpart D = The affected facility does not meet the applicability requirements of 40 CFR Part 60, Subpart D. Electrical or Mechanical Output = More than 10% of the annual output is electrical or mechanical. SO2 Monitoring Type = No SO_2 monitoring. Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA. Subpart J = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart J. Output Based Limit = The facility is not electing to comply with the output based limit in § 60.44b(l)(3). Subpart E = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart E. Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK. Technology Type = None. ACF Option - SO2 = Other ACF or no ACF. Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines. Unit Type = Duct burner as part of combined cycle system (compliance on a 30-day rolling average basis determined by using a continuous emission monitoring system). ACF Option - PM = Other ACF or no ACF. Heat Release Rate = Natural gas oil with a heat release rate greater than 70 MBtu/hr/ft^3. 60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative. ACF Option - NOx = Other ACF or no ACF. 60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.
N-12	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.
N-13	40 CFR Part 63, Subpart DDDDD	63DDDDD	Construction/Reconstruction Date = Construction or reconstruction began on or before June 4, 2010.

Unit ID	Regulation	Index Number	Basis of Determination*
X-8501	30 TAC Chapter 111, Visible Emissions	R1111-A	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
X-8502	30 TAC Chapter 111, Visible Emissions	R1111-A	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
X-8502	40 CFR Part 60, Subpart A	60A-1	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the requirements in 40 CFR § 60.18(c)(3)(i).
X-8502	40 CFR Part 60, Subpart A	60A-2	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
X-8502	40 CFR Part 63, Subpart A	63A-1	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(i).
X-8502	40 CFR Part 63, Subpart A	63A-2	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Steam assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
GTG-1	30 TAC Chapter 117, Subchapter B	R-117	Megawatt Rating = MR is greater than or equal to 30 MW. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020. Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units. Service Type = Stationary gas turbine. NOx Emission Limitation = Title 30 TAC §§ 117.105 or 117.305.
GTG-1	40 CFR Part 60, Subpart GG	60GG-C	Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner). NOx Control Method = Selective catalytic reduction. Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr) Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004. NOx Allowance = The owner or operator is not electing to use a NO_x allowance in determining emission limits in 40 CFR § 60.332(a). NOx Monitoring Method = Continuous emission monitoring system. Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel.

Unit ID	Regulation	Index Number	Basis of Determination*
			Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam. Fuel Type Fired = Natural gas meeting the definition in § 60.331(u). Regulated Under Part 75 = Monitoring parameters are established under § 60.334(f) of Subpart GG. Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation. Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage. Turbine Combustion Process = Combustion process is lean-premix staged combustion. Fuel Monitoring Schedule = Monitoring and recording the sulfur content once per unit operating day. Manufacturer's Rated Base Load = Base load is greater than 30 MW.
GTG-2	30 TAC Chapter 117, Subchapter B	R-117	Megawatt Rating = MR is greater than or equal to 30 MW. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020. Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units. Service Type = Stationary gas turbine. NOx Emission Limitation = Title 30 TAC §§ 117.105 or 117.305.
GTG-2	40 CFR Part 60, Subpart GG	60GG-C	Duct Burner = The turbine is part of a combined cycle turbine system equipped with supplemental heat (duct burner). NOx Control Method = Selective catalytic reduction. Peak Load Heat Input = Heat Input is greater than 100 MMBtu/hr (107.2 GJ/hr) Construction/Modification Date = On or after October 3, 1982 and before July 8, 2004. NOx Allowance = The owner or operator is not electing to use a NO_x allowance in determining emission limits in 40 CFR § 60.332(a). NOx Monitoring Method = Continuous emission monitoring system. Sulfur Content = Compliance is demonstrated by determining the sulfur content of the fuel. Turbine Cycle = Unit recovers heat from the gas turbine exhaust to heat water or generate steam. Fuel Type Fired = Natural gas meeting the definition in § 60.331(u). Regulated Under Part 75 = Monitoring parameters are established under § 60.334(f) of Subpart GG. Subpart GG Service Type = Type of service other than research and development, emergency, military or electrical utility generation. Fuel Supply = Stationary gas turbine is supplied its fuel without intermediate bulk storage. Turbine Combustion Process = Combustion process is lean-premix staged combustion. Fuel Monitoring Schedule = Monitoring and recording the sulfur content once per unit operating day. Manufacturer's Rated Base Load = Base load is greater than 30 MW.
F-1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-B	Compressor Seals = The fugitive unit does not contain compressor seals. Flanges = The fugitive unit contains flanges. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit does not have process drains. Pump Seals = The fugitive unit contains pump seals.

Unit ID	Regulation	Index Number	Basis of Determination*
			Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.
F-1	40 CFR Part 60, Subpart VV	60VV-C	Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems. Compressors = The fugitive unit contains compressors. Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices. Flare = The fugitive unit contains flares. Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service. Sampling Connection Systems = The fugitive unit does not contain sampling connection systems. Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service. Vapor Recovery System = The fugitive unit does not contain vapor recovery systems. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in heavy liquid service. Vacuum Service = The fugitive unit does not contain equipment in vacuum service. Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service. Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10. Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3. Complying with 40 CFR § 60.482-8 = Pumps in heavy liquid service are complying with § 60.482-8. Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service. Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7. Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr.

Unit ID	Regulation	Index Number	Basis of Determination*
			Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service. Flanges and Other Connectors = The fugitive unit contains flanges and other connectors. Open-ended Valves or Lines = The fugitive unit does not contain open-ended valves or lines. Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service. Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in heavy liquid service. Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials. Beverage Alcohol Production = The facility does not produce only beverage alcohol. Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2. Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8. Equipment in VOC Service = The facility contains equipment designed to operate in VOC service.
F-1	40 CFR Part 63, Subpart YY	63YY-A	Source Type = Ethylene Production. Equipment Type = The fugitive unit contains equipment, as defined in § 63.1101, contactin hazardous air pollutants in Tables 1 through 7 or Table 9, as appropriate.
F-4	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352-B	Compressor Seals = The fugitive unit contains compressor seals. Flanges = The fugitive unit contains flanges. Pressure Relief Valves = The fugitive unit contains pressure relief valves. Process Drains = The fugitive unit does not have process drains. Pump Seals = The fugitive unit contains pump seals. Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks. Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for flanges or no alternate has been requested. Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components. Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight. Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1). Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations. TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Flanges do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1). TVP of Process Fluid VOC <= 0.044 PSIA AT 68° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit. TVP of Process Fluid VOC > 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit. Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).

Unit ID	Regulation	Index Number	Basis of Determination*
F-4	40 CFR Part 60, Subpart VV	60VV-C	Closed Vent (or Vapor Collection) Systems = The fugitive unit contains closed vent or vapor collection systems. Compressors = The fugitive unit contains compressors. Enclosed Combustion Device = The fugitive unit does not contain enclosed combustion devices. Flare = The fugitive unit contains flares. Produces Chemicals = The fugitive unit is part of a facility that produces as an intermediate or final product one or more of the chemicals listed in 40 CFR § 60.489. Pumps in Heavy Liquid Service = The fugitive unit contains pumps in heavy liquid service. Sampling Connection Systems = The fugitive unit does not contain sampling connection systems. Valves in Gas/Vapor or Light Liquid Service = The fugitive unit contains valves in gas/vapor or light liquid service. Vapor Recovery System = The fugitive unit does not contain vapor recovery systems. Affected Facility = The fugitive unit is part of a facility that is an affected facility as defined in 40 CFR § 60.480(a)(2). Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in heavy liquid service. Vacuum Service = The fugitive unit does not contain equipment in vacuum service. Construction/Modification Date = After January 5, 1981 and on or before November 7, 2006. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in gas/vapor or light liquid service. Complying with 40 CFR § 60.482-10 = Flares are complying with § 60.482-10. Complying with 40 CFR § 60.482-3 = Compressors are complying with § 60.482-3. Complying with 40 CFR § 60.482-8 = Pumps in heavy liquid service are complying with § 60.482-8. Pumps in Light Liquid Service = The fugitive unit contains pumps in light liquid service. Complying with 40 CFR § 60.482-7 = Valves in gas/vapor or light liquid service are complying with § 60.482-7. Design Capacity = Site with a design capacity is greater than or equal to 1,000 Mg/yr. Equivalent Emission Limitation = No equivalent emission limitation is used for pumps in light liquid service. Flanges and Other Connectors = The fugitive unit contains flanges and other connectors. Open-ended Valves or Lines = The fugitive unit does not contain open-ended valves or lines. Pressure Relief Devices in Gas/Vapor Service = The fugitive unit contains pressure relief devices in gas/vapor service. Valves in Heavy Liquid Service = The fugitive unit contains valves in heavy liquid service. Equivalent Emission Limitation = No equivalent emission limitation is used for valves in heavy liquid service. Produces Heavy Liquid Chemicals = The facility produces chemicals other than or in addition to heavy liquid chemicals only from heavy liquid feed or raw materials. Beverage Alcohol Production = The facility does not produce only beverage alcohol. Complying with 40 CFR § 60.482-2 = Pumps in light liquid service are complying with § 60.482-2. Complying with 40 CFR § 60.482-8 = Valves in heavy liquid service are complying with § 60.482-8. Equipment in VOC Service = The facility contains equipment designed to operate in VOC service.
F-4	40 CFR Part 63, Subpart H	63H-1	ANY (CLOSED VENT SYSTEMS) = COMPONENT PRESENT ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT BYPASS LINES = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEMS CONTAINING BY-PASS LINES THAT COULD DIVERT A VENT STREAM AWAY FROM THE CONTROL DEVICE AND TO THE ATMOSPHERE

Unit ID	Regulation	Index Number	Basis of Determination*
			EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PUMPS) = COMPONENT PRESENT NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES RECOVERY OR RECAPTURE DEVICES (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT UNSAFE TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS UNSAFE TO INSPECT ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT DIFFICULT TO INSPECT = FUGITIVE UNIT CONTAINS ANY CLOSED-VENT SYSTEM WITH PARTS DESIGNATED AS DIFFICULT TO INSPECT GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE ANY (COMPRESSORS) = COMPONENT PRESENT EMPLOYEE NUMBER = THE CORPORATION EMPLOYS 100 OR MORE PERSONS ENCLOSED COMBUSTION DEVICES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS = COMPONENT PRESENT HEAVY LIQUID SERVICE (VALVES) = COMPONENT PRESENT LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT DOES NOT CONTAIN ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL) FLARES (CLOSED VENT SYSTEMS) = COMPONENT PRESENT GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT
F-5	40 CFR Part 63,	63YY-A	Heat Exchange System = The cooling tower/heat exchange system is subject to the requirements of 40 CFR § 63.1100(e).

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart YY		
D-2503X	30 TAC Chapter 115, Water Separation	R5112-B	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Any single or multiple compartment VOC water separator which separates materials having a true vapor pressure less than 0.5 psia (3.4 kPa) obtained from any equipment.
D-8009AX	30 TAC Chapter 115, Water Separation	R151-B	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Direct flame incinerator.
D-8009AX	40 CFR Part 61, Subpart FF	61FF-CA	Alternate Means of Compliance = NO By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE Alternative Standards for Oil-Water Separator = NO Control Device Type/Operation = CARBON ADSORPTION SYSTEM NOT REGENERATING BED DIRECTLY IN DEVICE Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE Carbon Replacement Interval = EXHAUST IS MONITORED ON A REGULAR SCHEDULE AND CARBON IS REPLACED IMMEDIATELY UPON BREAKTHROUGH Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC) Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349
D-8009AX	40 CFR Part 61, Subpart FF	61FF-TO	Alternate Means of Compliance = NO By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE Alternative Standards for Oil-Water Separator = NO Control Device Type/Operation = THERMAL VAPOR INCINERATOR REDUCING ORGANICS BY 95 WEIGHT PERCENT OR GREATER Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE Alternate Monitoring Parameters = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART FF Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC) Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349
D-8009AX	40 CFR Part 63, Subpart G	63G-CA	Alternate Monitoring Parameters: = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G Negative Pressure = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F Closed Vent System = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.172 New Source = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G

Unit ID	Regulation	Index Number	Basis of Determination*
			Bypass Lines = NO BYPASS LINE Combination of Control Devices = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES Oil-Water Separator Type = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE Control Device Type = CARBON ADSORBER Monitoring Options = CONTROL DEVICE IS USING AN ORGANIC MONITORING DEVICE AS ALLOWED UNDER § 63.143(E)(2) Continuous Monitoring = COMPLYING WITH THE CONTINUOUS MONITORING REQUIREMENTS OF § 63.143(E)(1) OR § 63.143(E)(2) IN TABLE 13
D-8009AX	40 CFR Part 63, Subpart G	63G-TO	Alternate Monitoring Parameters: = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G Negative Pressure = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F Closed Vent System = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.172 New Source = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G Bypass Lines = NO BYPASS LINE Combination of Control Devices = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES Oil-Water Separator Type = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE Control Device Type = THERMAL VAPOR INCINERATOR Monitoring Options = CONTROL DEVICE IS USING THE MONITORING PARAMETERS SPECIFIED IN TABLE 13 Continuous Monitoring = COMPLYING WITH THE CONTINUOUS MONITORING REQUIREMENTS OF § 63.143(E)(1) OR § 63.143(E)(2) IN TABLE 13
D-8009BX	30 TAC Chapter 115, Water Separation	R151-B	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Direct flame incinerator.
D-8009BX	40 CFR Part 61, Subpart FF	61FF-CA	Alternate Means of Compliance = NO By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE Alternative Standards for Oil-Water Separator = NO Control Device Type/Operation = CARBON ADSORPTION SYSTEM NOT REGENERATING BED DIRECTLY IN DEVICE Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE Carbon Replacement Interval = EXHAUST IS MONITORED ON A REGULAR SCHEDULE AND CARBON IS REPLACED IMMEDIATELY UPON BREAKTHROUGH Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC) Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349

Unit ID	Regulation	Index Number	Basis of Determination*
D-8009BX	40 CFR Part 61, Subpart FF	61FF-TO	Alternate Means of Compliance = NO By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE Alternative Standards for Oil-Water Separator = NO Control Device Type/Operation = THERMAL VAPOR INCINERATOR REDUCING ORGANICS BY 95 WEIGHT PERCENT OR GREATER Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE Alternate Monitoring Parameters = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART FF Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NON-NEGATIVE PRESSURE (GREATER THAN ATMOSPHERIC) Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349
D-8009BX	40 CFR Part 63, Subpart G	63G-CA	Alternate Monitoring Parameters: = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G Negative Pressure = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F Closed Vent System = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.172 New Source = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G Bypass Lines = NO BYPASS LINE Combination of Control Devices = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES Oil-Water Separator Type = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE Control Device Type = CARBON ADSORBER Monitoring Options = CONTROL DEVICE IS USING AN ORGANIC MONITORING DEVICE AS ALLOWED UNDER § 63.143(E)(2) Continuous Monitoring = COMPLYING WITH THE CONTINUOUS MONITORING REQUIREMENTS OF § 63.143(E)(1) OR § 63.143(E)(2) IN TABLE 13
D-8009BX	40 CFR Part 63, Subpart G	63G-TO	Alternate Monitoring Parameters: = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART G Negative Pressure = FIXED ROOF AND CLOSED-VENT SYSTEM ARE NOT OPERATED AND MAINTAINED UNDER NEGATIVE PRESSURE Process Wastewater = OIL-WATER SEPARATOR RECEIVES, MANAGES, OR TREATS PROCESS WASTEWATER STREAMS AS DEFINED IN TITLE 40 CFR PART 63, SUBPART F Closed Vent System = CLOSED VENT SYSTEM IS SUBJECT TO AND COMPLYING WITH § 63.172 New Source = FACILITY IS A EXISTING SOURCE AS DEFINED IN MACT G Bypass Lines = NO BYPASS LINE Combination of Control Devices = VENT STREAM IS NOT TREATED USING A COMBINATION OF CONTROL DEVICES Oil-Water Separator Type = FIXED ROOF AND A CLOSED-VENT SYSTEM THAT ROUTES THE ORGANIC HAZARDOUS AIR POLLUTANT VAPORS VENTED FROM THE OIL-WATER SEPARATOR TO A CONTROL DEVICE Control Device Type = THERMAL VAPOR INCINERATOR Monitoring Options = CONTROL DEVICE IS USING THE MONITORING PARAMETERS SPECIFIED IN TABLE 13 Continuous Monitoring = COMPLYING WITH THE CONTINUOUS MONITORING REQUIREMENTS OF § 63.143(E)(1) OR § 63.143(E)(2)

Unit ID	Regulation	Index Number	Basis of Determination*
			IN TABLE 13
D-8010X	30 TAC Chapter 115, Water Separation	R151-B	Alternate Control Requirement = The executive director (or the EPA Administrator) has not approved an ACR or exemption criteria in accordance with 30 TAC § 115.910. Exemption = Water separator does not qualify for exemption. Emission Control Option = Vapor recovery system which satisfies the provisions of 30 TAC § 115.131. Control Device = Direct flame incinerator.
N-10	30 TAC Chapter 115, Vent Gas Controls	R5121-G	Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration = VOC concentration is less than 612 ppmv. VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.
N-15	30 TAC Chapter 115, Vent Gas Controls	R5121-A	Alternate Control Requirement = Alternate control is not used. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
N-15A	30 TAC Chapter 115, Vent Gas Controls	R5121-A	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Smokeless flare Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.
N-16	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-19	30 TAC Chapter 115, Vent Gas Controls	R5121-D	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation

Unit ID	Regulation	Index Number	Basis of Determination*
			operation, as defined in 30 TAC § 115.10.
N-19	40 CFR Part 63, Subpart G	63G-1	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Performance Test = No previous performance test was conducted.
N-20A	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-20B	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-22	30 TAC Chapter 115, Vent Gas Controls	R5121-P	Alternate Control Requirement = Alternate control is not used. Control Device Type = Carbon adsorption system that replaces the carbon at a predetermined time interval. Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.
N-22	40 CFR Part 63, Subpart G	63G-1	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Absorber, condenser or carbon adsorber used as a recapture device and using an organic monitoring device as specified in 40 CFR § 63.114(b). Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Alternative to continuous monitoring as allowed under 40 CFR § 63.152(g). Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.

Unit ID	Regulation	Index Number	Basis of Determination*
			Performance Test = No previous performance test was conducted.
N-24A	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-24B	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
N-9	30 TAC Chapter 111, Visible Emissions	R111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
T-5702	40 CFR Part 63, Subpart G	63G-1	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 60, Subpart NNN Group 1 = The process vent meets the definition of a Group 1 process vent. Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Performance Test = No previous performance test was conducted.
T-5703	40 CFR Part 63, Subpart G	63G-1	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used. Control Device = Thermal incinerator. Overlap = Title 40 CFR Part 63, Subpart G only Group 1 = The process vent meets the definition of a Group 1 process vent.

Unit ID	Regulation	Index Number	Basis of Determination*
			Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118. Halogenated = Vent stream is not halogenated. By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device. Performance Test = No previous performance test was conducted.
T-3101	40 CFR Part 60, Subpart NNN	60NNN-G	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Boiler or process heater design heat input capacity greater than or equal to 44 MW (150 MMBtu/hr). Vent Type = A single distillation unit discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
T-5702	40 CFR Part 60, Subpart NNN	60NNN-B1	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = EPA Administrator approved demonstration of compliance with 40 CFR § 60.662 other than 40 CFR § 60.663(a), (b), (c), or (d). Vent Type = Distillation unit not discharging vent stream into a vapor recovery system. Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
T-5702	40 CFR Part 60, Subpart NNN	60NNN-B2	Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate. Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream. Construction/Modification Date = After December 30, 1983. TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device. Subpart NNN Control Device = Thermal incinerator. Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.

Unit ID	Regulation	Index Number	Basis of Determination*
			Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3). Total Design Capacity = 1 gigagram per year or greater. Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.
R-2501X	40 CFR Part 60, Subpart RRR	60RRR-A	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Bypass Line = There is a bypass line valve that could divert the vent stream around the control device and directly to the atmosphere. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Combination of a reactor process and the recovery system into which its vent stream is discharged. Bypass Line Valve Secured = The bypass line valve is monitored with a flow indicator. TOC Exemption = No TOC concentration exemption. Control Device = Incinerator other than a catalytic incinerator used as the control device. Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve. TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2). TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.
R-2501X	40 CFR Part 60, Subpart RRR	60RRR-E	Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate. Total Design Capacity = Total design capacity is 1 gigagram per year (1,100 tons per year) or greater. Construction/Modification Date = After June 29, 1990. Vent Stream Flow Rate = Vent stream flow rate is 0.011 scm/min or greater, or value is not measured. Affected Facility Type = Combination of a reactor process and the recovery system into which its vent stream is discharged. TOC Exemption = No TOC concentration exemption. Control Device = Control device other than an incinerator, boiler, process heater, or flare, approved by the EPA Subject to Title 40 CFR Part 60, Subpart DDD = The reactor process is not subject to the provisions of Title 40 CFR Part 60, Subpart DDD. Subject to Title 40 CFR Part 60, Subpart NNN = The vent stream is not routed to a distillation unit subject to Title 40 CFR Part 60, Subpart NNN or has other releases to the air than from a pressure relief valve. TRE Index Value = TRE index value is less than or equal to 8.0 or a TRE index value is not calculated or claimed for exemption 40 CFR § 60.700(c)(2). TRE for Halogenated Vent Stream = TRE index value is being calculated for a nonhalogenated vent stream.
N-22	40 CFR Part 61, Subpart FF	61FF-3	Unit Type = Individual drain system CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349 By-pass Line = System does not contain by-pass lines

Unit ID	Regulation	Index Number	Basis of Determination*
			Control Device Type/Operation = Carbon adsorption system that does not regenerate the carbon bed directly in the control device. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance. Carbon Replacement Interval = Carbon adsorber is monitored and carbon replaced on indication of breakthrough.
X-5702	40 CFR Part 61, Subpart FF	61FF-2	Unit Type = Individual drain system CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349 By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent. Engineering Calculations = Performance tests are used to demonstrate the control device achieves compliance. Alternate Monitoring Parameters = Complying with the monitoring parameters in § 61.354 for the control device.
X-8501	40 CFR Part 61, Subpart FF	61FF-1	Unit Type = Individual drain system CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349 By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare.
X-8502	40 CFR Part 61, Subpart FF	61FF-1	Unit Type = Individual drain system CLOSED VENT SYSTEM AND CONTROL DEVICE AMOC = Complying with the requirements of § 61.349 By-pass Line = System does not contain by-pass lines Control Device Type/Operation = Flare.
HONWWTP	40 CFR Part 63, Subpart G	63G-CA	Series of Processes = The wastewater stream is treated using a series of treatment processes. Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or no alternate has been requested. Hard Piping = The wastewater stream for a combination of treatment processes is conveyed by hard piping. Compliance Under Title 40 CFR § 63.138(a)(7)(ii) = Complying with Title 40 CFR § 63.138(a)(7)(i). Vented to Control = Emissions from the treatment process are vented to a control device. Regeneration = The carbon bed is not regenerated onsite. Series Design Evaluation = Compliance for the series of treatment processes is demonstrated using design evaluation across the series of processes. Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172. Performance Tests = Design evaluation is used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. By-Pass Lines = No by-pass lines. Combination of Control Devices = The vent stream is treated using a single control device. Monitoring Options = Control device is using an organic monitoring device as allowed under § 63.143(e)(2). Continuous Monitoring = Complying with the continuous monitoring requirements of § 63.143(e)(1) or § 63.143(e)(2) in Table 13 of Subpart G. Control Devices = Carbon adsorber.

Unit ID	Regulation	Index Number	Basis of Determination*
HONWWTP	40 CFR Part 63, Subpart G	63G-TO	Compliance With 40 CFR § 63.139(c)(1) = The enclosed combustion device being used meets the 95% reduction provisions specified in 40 CFR § 63.139(c)(1)(i). Series of Processes = The wastewater stream is treated using a series of treatment processes. Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or no alternate has been requested. Hard Piping = The wastewater stream for a combination of treatment processes is conveyed by hard piping. Compliance Under Title 40 CFR § 63.138(a)(7)(ii) = Complying with Title 40 CFR § 63.138(a)(7)(i). Vented to Control = Emissions from the treatment process are vented to a control device. Series Design Evaluation = Compliance for the series of treatment processes is demonstrated using design evaluation across the series of processes. Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172. Performance Tests = Design evaluation is used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. By-Pass Lines = No by-pass lines. Combination of Control Devices = The vent stream is treated using a single control device. Monitoring Options = Control device is using the monitoring parameters specified in Table 13 of Subpart G. Continuous Monitoring = Complying with the continuous monitoring requirements of § 63.143(e)(1) or § 63.143(e)(2) in Table 13 of Subpart G. Control Devices = Thermal vapor incinerator.
T-8201	40 CFR Part 63, Subpart G	63G-1	Series of Processes = The wastewater stream is treated using a series of treatment processes. Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or no alternate has been requested. Hard Piping = The wastewater stream for a combination of treatment processes is conveyed by hard piping. Compliance Under Title 40 CFR § 63.138(a)(7)(ii) = Complying with Title 40 CFR § 63.138(a)(7)(i). Vented to Control = Emissions from the treatment process are vented to a control device. Series Design Evaluation = Compliance for the series of treatment processes is demonstrated using design evaluation across the series of processes. Closed Vent System = Closed vent system is not maintained under negative pressure and is subject to 40 CFR § 63.172. Performance Tests = Design evaluation is used to demonstrate that the control device or combination of control devices achieves the appropriate conditions. By-Pass Lines = No by-pass lines. Combination of Control Devices = The vent stream is treated using a single control device. Monitoring Options = Control device is using the monitoring parameters specified in Table 13 of Subpart G. Control Devices = Flare.
F-2	40 CFR Part 63, Subpart F	63F	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or

Unit ID	Regulation	Index Number	Basis of Determination*
			more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.
F-2A	40 CFR Part 63, Subpart F	63F	Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii). Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water. Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2. Table 4 HAP Content = The recirculating heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 4 of title 40 CFR Part 63, Subpart F. Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested. NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration. Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv). Heat Exchange System = A heat exchange system is utilized. Table 9 HAP Content = The once-through heat exchange system is not used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G. Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak. Cooling Water Pressure = The heat exchange system is not operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.

* - The “unit attributes” or operating conditions that determine what requirements apply

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: GHGPSDTX3	Issuance Date: 08/24/2012
PSD Permit No.: PSDTX903M5	Issuance Date: 11/17/2016
Nonattainment (NA) Permits	
NA Permit No.: N007M1	Issuance Date: 11/17/2016
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 36644	Issuance Date: 11/17/2016
Authorization No.: 81912	Issuance Date: 05/15/2008
Authorization No.: 84227	Issuance Date: 03/05/2008
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 09/04/2000
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

*For reference, EPA issued permit PSD-TX-903-GHG has been assigned TCEQ permit number GHGPSDTX3.

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in

the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;

2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and

3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: N-19	
Control Device ID No.: X-5702	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-D
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Oxygen concentration.	
Minimum Frequency: 4 times per hour.	
Averaging Period: One hour.	
Deviation Limit: O2 concentration less than 0.8% or greater than 20% when receiving vent streams.	
Basis of CAM: It is widely practiced and accepted to calibrate and use a portable analyzer or CEMS to measure oxygen concentration with procedures such as EPA Test Method 3A. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. Additionally, measuring the oxygen concentration is provided as a monitoring option for any control device because an increase in oxygen concentration may be indicative of the control device performance. Outlet oxygen concentration has been used as an indicator in many federal and state rules.	

Unit/Group/Process Information	
ID No.: N-19	
Control Device ID No.: X-5702	Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-D
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Combustion temperature.	
Minimum Frequency: 4 times per hour.	
Averaging Period: One hour.	
Deviation Limit: When receiving vent streams, the combustion temperature shall be less than 1800 degrees F, or as authorized as part of a permit alteration request submittal approved by the TCEQ Executive Director.	
Basis of CAM: It is widely practiced and accepted to use performance tests, manufacturer's recommendations, engineering calculations and/or historical data to establish a minimum temperature for thermal incinerators. This minimum temperature must be maintained in order for the proper destruction efficiency. Operation below the minimum combustion temperature will result in incomplete combustion and potential noncompliance with emission limitations and/or standards. The monitoring of the combustion temperature of a thermal incinerator is commonly required in federal and state rules, including: 40 CFR Part 60, Subparts III, NNN, QQQ, and RRR; 40 CFR Part 61, Subparts BB and FF; 40 CFR Part 63, Subparts G, R, DD, EE, and HH; and 30 TAC Chapter 115.	

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: N-16	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Presence of visible emissions of 15% opacity (Method 9).	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: N-20A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once/quarter	
Averaging Period: n/a	
Deviation Limit: Presence of visible emissions or 15 % Opacity if Method 9 is used	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA¿s ¿Compliance Assurance Monitoring (CAM) Technical Guidance Document¿ (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA¿s Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to ¿EPA Reference Method 22¿ procedures.	

Unit/Group/Process Information	
ID No.: N-20B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once/quarter	
Averaging Period: n/a	
Deviation Limit: Presence of visible emissions or 15 % Opacity if Method 9 is used	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA¿s ¿Compliance Assurance Monitoring (CAM) Technical Guidance Document¿ (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA¿s Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to ¿EPA Reference Method 22¿ procedures.	

Unit/Group/Process Information	
ID No.: N-24A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once/quarter	
Averaging Period: n/a	
Deviation Limit: Presence of visible emissions or 15 % Opacity if Method 9 is used	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA¿s ¿Compliance Assurance Monitoring (CAM) Technical Guidance Document¿ (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA¿s Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to ¿EPA Reference Method 22¿ procedures.	

Unit/Group/Process Information	
ID No.: N-24B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once/quarter	
Averaging Period: n/a	
Deviation Limit: Presence of visible emissions or 15 % Opacity if Method 9 is used	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA¿s ¿Compliance Assurance Monitoring (CAM) Technical Guidance Document¿ (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA¿s Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to ¿EPA Reference Method 22¿ procedures.	

Unit/Group/Process Information	
ID No.: N-9	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Visible emissions exceed 15% opacity.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes

OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes